

AUSTRALIAN COLEOPTERA—NOTES AND NEW SPECIES NO. iii.

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(Ten Text-figures.)

[Read 26th March, 1924.]

The following notes are the outcome of my recent visit to the British Museum of Natural History and to the Hope Museum. There are added descriptions of two new genera of Buprestidae, with two and three new species respectively; two new genera of Tenebrionidae, of which one belongs to a subfamily (Heterotarsinae) not hitherto recorded from Australia and which is apparently closely allied to a North American genus; and a few new species that recent investigations show to be undescribed.

BUPRESTIDAE.

My revision of the genus *Stigmodera* (Trans. Roy. Soc. S. Aus., 1916) should be corrected as follows:—

Stigmodera cyaniventris Kerr. = *S. variabilis* Don.

S. viridicincta Waterh. var. = *S. carpentariae* Blkb.

The latter species was omitted from my list of synonyms by accident. Blackburn's type is almost identical with the specimen marked *viridicincta* var. by Waterhouse, the type itself being an unusual form of a fairly common North Queensland species.

S. major Waterh. is a variety of *pubicollis* Waterh., as stated by its author, and not as in my tabulation under *parryi* Hope.

S. aeneicornis Saund. is a distinct species *not* synonymous with *rotundata* Saund., and should stand in my table near *disjecta* Kerr. (No. 215).

S. deleta Kerr. is a distinct species, not a variety of *mastersi* Mael.; Kerremans labelled every example of a species he described as "type" and, in some cases, two different species are marked with identical labels, e.g., of two specimens labelled "*inermis* Kerr. type," one is a *distincta* Saund., the other is *nova* Kerr.).

S. pallidipennis Blackb. is a small example of *auricollis* Thoms.

S. addenda Kerr. (*nom. praeocc.* by Thomson) = *straminea* Mael.—a common form of this species without the lateral maculae; later also described by Théry as *S. johannae*.

S. septemguttata Waterh. = *tyrrhena* Blackb., a variable species in which the fasciae are often broken up into spots. (Types compared). Waterhouse's name has priority.

S. anchoralis C. and G. = *agrestis* Kerr.

S. rubriventris Blackb.—The type of this was described from Western Australia and is *not* the species usually labelled in Australian collections under that

name, which is a well-known Eastern species (N.S.W.) described as *maculifera* Kerr. (erroneously given in my tabulation as a synonym of *rubriventris*).

S. simulata C. and G. = *perplexa* Hope = *lanuginosa* Hope. The last two of these were placed by Saunders as synonyms of *burchelli* C. and G., a mistake repeated by Masters.

S. hostilis Blackb.—An examination of the type has convinced me that this is a good species, with each elytron trispinose, and therefore is not synonymous with *burchelli* C. and G.

S. suavis Kerr. is only one of the many forms of *scalaris* Boisd. (= *cyanicollis* B.).

S. libens Kerr. (omitted from my tabulation, *vide loc. cit.*, p. 99) is synonymous with *alternecosta* Thoms.

STIGMODERA PRAETERITA, n.sp.

♂. Elongate, oblong; head, pronotum, scutellum, underside and legs dark brassy-green or black, the pronotum with yellow margins, antennae green; elytra yellow, sometimes clouded (by the darkening of the striae and seriate punctures); the apical three-quarters of suture dark green, or bluish; this dark part widening anteriorly and towards apex, to a variable degree; apical segments of abdomen sometimes yellow at sides. *Head* channelled and coarsely punctate. *Prothorax* depressed, strongly bisinuate at apex and at base, anterior angles acutely produced, base with wide medial lobe, angulately excised near the yellow margin; sides straight (parallel or slightly obliquely widening) on basal half, thence rather abruptly narrowed to apex, posterior angles rectangular; disc finely and evenly punctate (without a sign of rugosity), the medial channel smooth and very clearly defined. *Elytra* sub-parallel on basal two-thirds, thence rather sharply attenuated to apex, and not quite covering the abdomen; apices variably bidentate, a strong sutural tooth obliquely directed inwards, and an external tooth (unusually variable in length), the interspace arcuate; disc striate-punctate, the punctures in striae irregular, intervals nearly flat, the interval between the 5th and 6th striae wide and coarsely punctate; underside sparsely clothed with long whitish hairs, finely and evenly punctured, the prosternum lightly transversely rugose, the last segment of abdomen widely excised.

♀ differs in the following: colour of head, prothorax, underside and appendages black (in two only of nine females examined green, while of the three males one had these parts black, the abdomen bluish, rarely greenish), the exterior apical spine of elytra short; apical segment of abdomen rounded. *Dimensions*: ♂ 26-29 x 9-10 mm.; ♀ 30-32 x 10-12 mm.

Hab.—New South Wales: Kuring-gai Chase and Mona Vale, on *Angophora cordifolia* (H. J. Carter). A species that has surprisingly escaped notice in a district that has been more closely collected than any in Australia. This is probably due to its superficial likeness in the field to some forms of *S. variabilis* Don, which also occurred in numbers at the time of its capture. In structure and sculpture it is very close to *S. affinis* Saund., as also in the arrangement of dark colour on the elytra; but besides the absence of any red colour on pronotum and elytra and the frequent black surface of body, it is differentiated from *affinis* by (1) the bispinose apices of elytra, (2) the strongly angulated baso-lateral excision of pronotum, (3) the sharper angles of pronotum. Twelve examples were taken during December, 1923, of which three only were males. Types in Coll. Carter.

Stigmodera affinis Saund.—The author states that "the puncturation of the thorax is larger and deeper" than in *S. limbata* Don. This is misleading, since

one of the main distinctions between these species lies in the evidently finer sculpture of *affinis*, from which the interpunctural rugosities which characterize the pronotum of *limbata* are absent. Also the "two apical segments spotted with red on the sides," is not a constant character.

STIGMODERA COMMIXTA, n.sp. (Text-fig. 1.)

Ovate; surface violaceous blue, the elytra with medial and sub-apical fasciae yellow, sometimes also with a small yellow spot near base at middle, *not extending to sides or base*; antennae bronze; tarsi greenish-bronze. *Pronotum* very convex, more sinuate at base than at apex, anterior angles acutely produced, sides widely rounded with greatest width near the middle, disc moderately punctate on basal half, closely so at apex. *Elytra* obovate, widened at shoulders and post-medially, hind margins finely serrated, apices with a small lunation without spines; disc striate-punctate, intervals convex, and coarsely punctate; underside finely and closely punctate with sparse, white pubescence. *Dimensions*: 15-18 x 6-8 mm.

Hab.—New South Wales: Sydney (G. S. Bryant and H. J. Carter). This is the species referred to in my Revision (p. 82) as a variety of *S. klugi* C. and G., but which, with more material, I am satisfied is a distinct species. While like *klugi* in general form and colour, the following differences may be tabulated:—

<i>S. klugi</i> (Text-fig. 2).	<i>S. commixta</i> .
<i>Head</i> with interocular space narrower and sub-parallel.	This area wider and diverging.
<i>Prothorax</i> , sides near base straight or slightly widening; widest behind middle.	More convex, sides widely rounded, widest near middle.
<i>Underside</i> strongly punctate.	More finely punctate.

There is also a slight colour difference in the more violet shade of *commixta*, and a tendency of the yellow fasciae to be little or not interrupted at the suture, as in *klugi*.

Fifteen examples of *klugi* and eight of *commixta* are before me, with both sexes of each. In both there is sometimes a basal yellow spot on the elytra as well as the two fasciae. In *klugi* eight (1 ♂, 7 ♀) have the basal spot as in Saunders' figure, extending from near the scutellum to the sides and base, seven (♂) are without it. The yellow fasciae are generally more widely interrupted at the suture than in *commixta*. In *commixta* four (2 ♂, 2 ♀) have a small spot half way between scutellum and sides, but in no case extending to base or sides; four (2 ♂, 2 ♀) are without it.

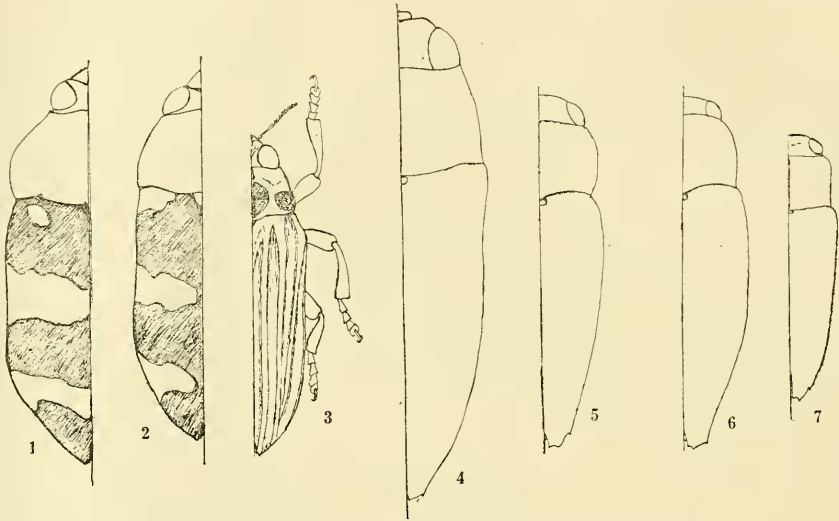
(*N.B.*—The sexes in both species are little differentiated by abdominal structure, the last segment being subtruncate in ♂, rounded in ♀). Type in Coll. Carter.

Stigmodera puerilis Kerr.—Amongst the vagaries of pattern variation in the genus, this species varies as follows: (1) The medial yellow fascia, usually divided at the suture, is connected and widened in that region, (2) the medial yellow fascia is not only connected at suture, but is extended to join the basal yellow spots. I have examples from the Dorrigo district, as well as five examples taken by myself at Gosford and Wahroonga, that show these variations.

STIGMODERA LATIPES, n.sp. (Text-fig. 3.)

Elongate oblong, rather flat; head, pronotum and scutellum bronzy-black, elytra red, underside blue-black; legs, tarsi and antennae black. *Head* prolonged in front, strongly punctate, deeply channelled between eyes. *Pronotum* bisinuate

at apex and base, anterior angles acute, sides nearly straight on anterior half; surface very uneven, with four prominent ear-like ridges, two on each lobe, the inner two enclosing a large oval fovea near base; the outer two forming a rounded extension at sides on basal half; medial channel deeply excised, the whole surface



Figs. 1-7.

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| 1. <i>Stigmodera commixta</i> . | 4. <i>Buprestodes coruscans</i> . |
| 2. <i>Stigmodera klugi</i> . | 5. <i>Notobubastes occidentalis</i> , ♂. |
| 3. <i>Stigmodera latipes</i> . | 6. <i>Notobubastes orientalis</i> , ♂. |
| | 7. <i>Notobubastes aurosulcata</i> . |

closely punctate. *Elytra*: sides sharply rectangular at junction with pronotum, rather strongly widened at shoulder, lightly compressed at middle, rounded and minutely crenate behind; apices finely and inconspicuously bidentate; each elytron with three carinate costae, of which the two inner are parallel throughout, the exterior diverging at shoulder; the lateral border forming a fourth, besides two faint scutellary costae; the sutural edges also sub-carinate. Sternal area coarsely punctate, abdomen finely strigose-punctate, the apical segment densely and finely punctate; tibiae and tarsi unusually widened, the former flattened. *Dimensions*: 14 x 5 mm.

Hab.—New South Wales: Coonabarabran district (H. J. Carter). Two ♀ examples were taken by me on *Leptospermum* flowers at Timor, Warrumbungle Mountains, in November, 1923. The species belongs to my first section of the sub-genus *Castiarina*, "Elytra carinate costate," near *nasuta* Saund. and *spinolae* C. and G., but unmistakably distinct from these (and *praetermissa* Cart.) by elongate form, pronotal ridges and widened tibiae *inter multa alia*. Type in Coll. Carter.

Chalcotaenia martini Saund. = *bi-impressa* Carter. The latter name must therefore disappear. Saunders' species was erroneously placed under *Pseudo-taenia* by Kerremans, and this misled me. It is an anomalous species in that the medial line of the pronotum is raised apically while sulcate for the greater part. The prosternum is deeply sulcate. (Type examined).

Paracephala minuta Kerr. is evidently synonymous with *P. pistacina* Hope.

Nascio lunaris Kerr. is distinct from *vetusta* Boisd.

Euryspilus (Eurybia) australis Blackb.—This species is very doubtfully distinct from *E. chalcodes* C. and G. In examining a series of *E. chalcodes* taken at S. Perth on the same date and evidently conspecific, I notice differences of sculpture that correspond closely to Blackburn's differential character of *C. australis*. I think this difference is individual and may be sexual.

Anilara (Melobasis) obscura Macl. = *A. cuprescens* Kerr. = *A. uniformis* Kerr. = ? *A. platessa* Thoms.

I have already noted ("Revision of Melobasis," Trans. Ent. Soc. Lond., 1923, p. 70) the confusion of names *Anilara (Melobasis) obscura* Macl. and *Anilara (Anthaxia) obscura* Macl., and have proposed the name *A. macleayi* for the latter. A close inspection of Kerremans' types fails to show specific differences between his *cuprescens* and *uniformis*. Moreover, the locality, "Australie: Nouvelle Zélande" for *uniformis* requires confirmation. I have placed a query before Thomson's species, since the identification of his species is doubtful, though his name is general in collections for a common insect that is variable in size and that I have frequently secured by beating dead Eucalyptus boughs in New South Wales and Victoria. It is probable that *A. deplanata* Théry is the same species.

The genus *Anthaxia* does not, apparently, occur in Australia. The species described by Macleay as *Anthaxia* are referable either to *Anilara* or to *Melanophila*.

The genus *Anilara* is approaching the nebulous state that *Cisseis* was in. Six Australian species have recently been added by Théry (Mém. Ent. Soc. Belg., 1920) to the twenty so far recorded, but no one has been bold enough to attempt a tabulation of the genus.

Belionota saundersi Waterh. = *B. aenea* Deyr. = *B. carteri* Kerr. (MSS. ?).

Specimens from Cape York sent some years ago to Monsieur Kerremans were returned to me as *B. carteri* Kerr. sp. nov. I have no record of the publication of this name, but the species is certainly synonymous with *B. saundersi* Waterh., which I am unable to distinguish from a series labelled *aenea* Deyr. in the British Museum. Deyrolle's species has a long priority. In the Genera Insectorum, Kerremans gives Ile Damma as the habitat of *saundersi*, though the type came from Cape York, Australia.

BUPRESTODES (gen. nov. Buprestinorum).

Surface brilliantly metallic. Head lightly convex, front slightly flattened, not grooved; epistoma subangulately excised at apex; antennal cavities large and triangular, bordered above and below by prominent carina, open behind on margin of eye; antennae with first joint pyriform, 2nd, 3rd and 4th short and oval, successively increasing in length, 5th subconic, longer than 4th; 6th-11th dentate, each with a terminal poriferous fossette. Eyes large, elliptic, well separated, a little closer behind than in front. *Prothorax* sub-trapezoidal, sides feebly arched, lateral border sub-crenulate with ill-defined carina, apex feebly sinuate, anterior angles slightly advanced and acute; base bisinuate, with wide medial lobe and sub-acute posterior angles. *Scutellum* small, rounded and bilobed (or longitudinally cleft). *Elytra* moderately convex, sides lightly compressed and subangulately lobed in front of middle; posterior sides not denticulate, each apex truncate between two spines, the exterior spine the longer; disc coarsely striate-punctate, intervals varyingly convex. Prosternal process forming a bisulcate tongue. Basal segment of abdomen sulcate; hind tarsi with three basal joints subequal, fourth

short and bilobate, claw joint longest of all. Facies of *Chalcotaenia*. A genus apparently near *Melobasina*, of which, however, the pronotum has a straight anterior margin; the posterior sides of elytra denticulate, apical abdominal segment of male trifold *inter alia*.

BUPRESTODES CORUSCANS, n.sp. (Text-fig. 4.)

Robust, glabrous, upper surface brilliant golden copper, intermixed with green, the latter colour showing chiefly on head, sides of pronotum and humeral area of elytra; beneath fiery coppery, antennae greenish-coppery, tarsi metallic green.

Head: labrum prominent and rectangular, forehead coarsely longitudinally rugose-punctate. *Prothorax* irregularly and coarsely punctate on disc, rugose-punctate on sides, an irregular smooth line on basal half at middle, and a few irregularly placed smooth areas elsewhere. *Elytra* coarsely striate-punctate, with about ten convex intervals of darker colour than the rest of elytra, narrowing and subrenulate towards apex and sub-obsolete near base, the 1st, 3rd and 5th of these having irregularly spaced, fiery spots containing punctures, the punctures in striae large and irregular. *Prosternum* very coarsely punctate, its intercoxal process having a small convex area in middle, with a deep, punctate sulcus on each side of this; abdomen glabrous, irregularly punctate, basal segment sulcate in middle, apical segment finely rounded behind. *Dimensions*: 21-22 x 7-8 mm.

Hab.—Western Australia: Doverin and Kellerberrin (Mr. J. Clark). Two examples, both female, of this fine species, at first suggest inclusion among the Chalcophorini, but the structure of antennae and prothorax point to its place in the tribe *Buprestini*, though unlike any other Australian genus of this group.

Male wanting. Type in Coll. Carter.

BUPRESTODES VARIEGATA, n.sp.

Differs from the above species as follows: Head, prothorax, sides of elytra, underside and legs metallic green, the prothorax showing a few coppery areas at base and underside; middle area of elytra violet coppery, antennae and tarsi dark coppery.

Pronotum clearly carinate in middle on basal half. *Elytra* more regularly striate-punctate, without the irregular fiery areas on intervals; the large punctures in the 4th, 5th and 6th striae containing smaller punctures within. The prosternal tongue with setiferous punctures on middle convexity, the two punctate sulci finer and narrower; basal segment of abdomen longitudinally rugose, other segments coarsely punctate, the sides of meso- and metasternum, also of abdomen, clothed with fine, recumbent, golden hairs; apical segment sub-truncate, with projecting aedeagus. *Dimensions*: 19 x 6 mm.

Hab.—Western Australia: Kellerberrin. A single male example, also sent by Mr. J. Clark. This, when further material is available, may prove to be the male of *B. coruscans*, but apart from colour differences, the different sculpture of elytra, prosternum and abdomen justify its distinction until further evidence arrives. The head and pronotum of the two species are similar, the elytra are narrower and more sharply attenuated behind. The three examples noted above are the only specimens I have seen.

Female wanting. Type in Coll. Carter.

NOTOBUBASTES (gen. nov. Buprestinorum).

Antennae and antennal cavities as in *Bubastes*; eyes large, prominent, widely separated and nearly parallel. *Prothorax* shorter and less convex than in

Bubastes, apex subtruncate; the anterior angles a little produced, lateral carina more or less continuous on basal two-thirds, not visible from above; base strongly bisinuate, disc sulcate in middle. *Scutellum* transversely oval, moderately large. *Elytra* wider and less convex than in *Bubastes*, apices tridentate, posterior sides not serrated, surface striate-punctate; posterior tarsi with first joint clearly longer than the second.

A genus having a facies somewhat between *Bubastes* and *Melobasis*; differing from the latter in apical structure and the non-serrate elytra and from *Bubastes* in its wider, more explanate form, larger and more prominent eyes, larger scutellum, etc.

NOTOBUBASTES OCCIDENTALIS, n.sp. (Text-fig. 5.)

Elongate, subconical, unicoloured, dark purple bronze, head and underside sparsely and shortly pilose, beneath more nitid than above. *Head* lightly impressed, with a short carina in middle (near epistoma) and some vaguely raised spaces on each side of this forming a discontinuous oval; antennae short and as in *Bubastes*. *Prothorax* ($3\frac{1}{2} \times 5$ mm.): anterior angles feebly advanced, base rather strongly bisinuate, sides lightly incurved near apex and base nearly straight in middle; anterior angles obtuse, posterior subrectangular; disc coarsely rugose-punctate; medial sulcus rather wide with fine clear-cut line at its base, the sides with a few nitid pustules and sparse hair. *Scutellum* transverse, depressed in middle. *Elytra* roundly widening behind junction with prothorax, thence sub-obliquely narrowed to apex; apices tridentate, with a sharp sutural, a blunted medial, and a sharp externo-lateral tooth, the two last separated by a wide sinuous interval; striate-punctate, the striae clearly impressed on apical half, on basal half obscured by coarse punctures with flat transversely rugose intervals, the apical intervals between striae themselves containing punctures of the same size as striae, the 2nd, 4th, 6th more closely punctate than the rest; underside coarsely punctate. *Dimensions*: 16-17 x $5\frac{1}{2}$ - $6\frac{1}{2}$ mm.

Hab.—Western Australia: Cue (H. W. Brown). Four examples in my collection were collected by Mr. Brown who appears to have taken it in some quantity. The sculpture of the elytra is closely punctured everywhere with large punctures. These show clear longitudinal arrangement, with well-marked striae and convex intervals near apex, but the tendency of the punctures to form transverse ridges becomes more marked towards the middle; and these ridges gradually obscure the striae near base. The lateral margin is finely carinate; that is traceable to near the apex, without distinct serration. The sexes are little separated by external structure, the abdominal apical segment being shorter and truncate in ♂, rounded in ♀.

Types in Coll. Carter.

NOTOBUBASTES ORIENTALIS, n.sp. (Text-fig. 6.)

Elongate ovate, pronotum and elytra metallic purple, the former sometimes bronzy, head and underside bronze, sparsely albo-pilose, tarsi, antennae and front side of legs brownish purple. *Head* coarsely punctate, a depression above epistoma limited by an irregularly raised triangular margin, having its apex about the middle of forehead; antennae short and slender. *Prothorax* convex, feebly sinuous at apex, the middle slightly gibbous and advanced, base lightly bisinuate, sides moderately and evenly rounded, the angles slightly produced, the anterior obtuse, the posterior subrectangular, disc finely sulcate in middle, coarsely rugose-punctate, the punctures sparse on middle, especially near scutellum, rugose on sides, the

lateral carina interrupted or undulate, traceable only near base. *Scutellum* bright coppery, less transverse than in preceding. *Elytra* slightly wider than prothorax at base, sides a little compressed near middle, attenuate behind, margins entire, apices tridentate, sutural tooth short and acute, middle and lateral wide, their interspace wide and subtruncate; sulcate-punctate throughout, each elytron with ten sulci, the 10th on side; the punctures in sulci small, intervals convex, sharply so near apex, each with a row of widely placed punctures and transversely rugose near shoulders and sides; legs and underside very coarsely punctate, abdomen with longitudinal punctures irregular in size. *Dimensions*: 15-17 x 5½-6 mm.

Hab.—Queensland: Dawson River and Wide Bay (Macleay Mus.). Four examples, including the types, in the Macleay Museum, are clearly distinct, though closely allied to the former species. The chief distinctions are (1) brighter colour of, and more nitid, upper surface, (2) pronotum more coarsely sculptured, with more smooth spaces, (3) elytral intervals convex, (4) apices subtruncate between external spines.

NOTOBUBASTES AUROSULCATA, n.sp. (Text-fig. 7.)

Elongate oblong, dark purple bronze, pronotum reddish bronze, its medial sulcus metallic golden, head and underside rather thickly clothed with white recumbent hair. *Head*: Eyes prominent, smaller than in *N. occidentalis*; interspace wider than diameter of an eye, interior margins of eyes slightly converging behind, forehead lightly gibbous, surface coarsely rugose. *Prothorax* (2 x 3 mm.): apex subtruncate, the anterior angles slightly advanced, base lightly bisinuate, the posterior angles rectangular, sides nearly straight on basal two-thirds, thence roundly narrowed to apex, medial sulcus deep, limited by a short transverse ridge at basal margin, the sulcus accentuated by a slight gibbosity on each side, this portion nitid and sparsely pitted with round punctures of irregular size; towards the sides coarsely transversely rugose and pilose. *Scutellum* small, transversely oval. *Elytra* enlarged at shoulders, feebly narrowed behind, apices tridentate, the middle tooth the most prominent, striate-punctate, each elytron with 10 fine, well-marked striae, besides a short scutellary stria, each containing rows of close small punctures; intervals flat on medial area, lightly convex at sides and apex, a single row of large round metallic punctures on each interval, these irregularly placed (sometimes invading the narrow striae), humeral area and sides transversely ridged; epimera and metasternum with sparse, coarse punctures, mesosternum albo-floccose, abdomen pilose with a few large punctures showing near margins of segments. *Dimensions*: ♂. 11 x 3½ mm. ♀. 13 x 4 mm.

Hab.—North West Australia: Hammersley Range, Fortescue River (W. D. Dodd). Three examples from the South Australian Museum are near, but distinct from *N. occidentalis* by smaller, narrower form, sulcate pronotum with its irregular surface and sparser punctures, and the different elytral sculpture. The metallic pronotal sulcus and elytral punctures are also characteristic of this species. Types in South Australian Museum.

ETHON LEAI, n.sp.

Narrowly ovate, head and pronotum bronze, elytra purplish, above sparsely, beneath more densely pubescent. *Head* sharply and deeply intersected between eyes. *Prothorax* widely transverse, strongly bisinuate at apex and base, sides arcuately converging to the front, disc subconcentrically striolate, with a few scratch-like punctures in middle area, depressed laterally, the depressed and medial areas sparsely pubescent. *Scutellum* large and triangular. *Elytra* seriate-

punctate, the serial punctures fine and close, interspaces closely covered with a minute transverse rugosity; a thin white pubescence extending in two wide lines on middle of each elytron from base to apex, this vaguely sub-fasciate towards apex. Prosternum rather coarsely punctate, rest of underside finely sealose-punctate with moderate pubescence. *Dimensions*: ♂. 5.5-6 x 2-2.3 mm. ♀. 7 x 2.5 mm.

Hab.—South Australia (Meadows. In South Australian Museum), Nariootpa (J. G. O. Tepper). Ten examples examined are somewhat like small examples of *E. affinis* C. and G., but may be distinguished by the rugose elytra, and the sub-continuous elytral pubescence, as well as by its small size. *E. brevis* Cart. is a wider species with coarser seriate punctures and bifasciate pubescence.

Type in South Australian Museum.

CISSEIS VIRIDI-PURPUREA, n.sp.

Oblong oval. Head, pronotum, underside and appendages golden-green or green, elytra bright purple, the elytra scarcely, the underside *not* pubescent. *Head* nearly flat, finely channelled, vertex closely, not very finely, punctate. *Prothorax*: apex lightly produced in middle, base strongly bisinuate, sides arcuately narrowed from base to apex, lateral carinae subparallel, anterior angles acute, posterior obtuse, disc transversely depressed near base, with fine transverse striolation. *Scutellum* transversely oval. *Elytra* lightly enlarged at shoulder, separately rounded at apex, the apical margins finely serrated; a little gibbous behind scutellum, the surface finely and regularly covered with scale-like punctures. *Prosternum* coarsely, meso- and meta-sternum moderately, abdomen finely and closely punctate. *Dimensions*: 5 x 2 mm.

Hab.—Western Australia: Geraldton (J. Clark); Victoria and Australia (Coll. Théry). Four examples examined, of the same size and of closely similar colour, of which two in my collection had hitherto been withheld from description as being possible forms of *C. tyrrena* mihi. The two further examples occur in a collection sent for determination by Mons. André Théry. The species cannot be matched with any that I have seen. While in colour like some examples of *tyrrhena*, it is without the pubescent spots of that species, besides being smaller and more bluntly oblong, among other differences.

I am not quite sure whether it should be placed in Sect. ii. or Sect. iii. of my tables, since the elytral pubescence is so feeble as to be faintly discoverable, with a Zeiss binocular, only in one of the four examples. If placed in Sect. iii., it should come between *roseo-cuprea* Hope and *minutissima* Thoms.; distinguished from both by its bicolorous upper surface.

Type in Coll. Carter.

CISSEIS CUPRIPENNIS Guér.—By inadvertence this species was omitted from the tables in my Revision of the Genus, though mentioned in the introduction (p. 161). It is one of the species in which there is sex colouration, the males having a green head and pronotum, the females a more or less concolorous surface. The amount of elytral pubescence, always slight, depends on the freshness of the specimen; it is often found in collections without pubescence. Its place should be in Sect. ii., Group B., p. 165, between *acducta* Kirby and *scabrosula* Kerr., which may be tabulated thus:—

8. Rather widely oval, elytra nitid, underside pubescent (8-10 mm.)
 *acducta* Kirby

- 9a. Narrowly oval, nitid above and below (6-8 mm.), male with head and pronotum green. *cupripennis* Guér.
 9b. Elytra with opaque, subcyaneous patch. *scabrosula* Kerr.

AGRILUS DODDI, n.sp.

Head a fiery copper, pronotum and elytra subnitid coppery bronze with patches of silvery pubescence as follows: the side of pronotum, a circular patch within the humeral foveae, a premedial comma-like patch on each side of suture, and a pair of similar but more elongate pre-apical patches close to suture, the last merging into the fine, close pubescence of the apical third area; underside albosquamose, showing coppery gleams where abraded: appendages coppery.

Head not wider than prothorax, feebly excavate between eyes, the latter not prominent, densely and finely punctate. *Prothorax*: apex feebly, base strongly bisinuate, sides nearly straight; disc transversely rugose; a large medial triangular, and a lateral elongate depression. *Scutellum* triangular. *Elytra* with a large sub-circular fovea at shoulder, lightly concave on each side of suture, the concavity limited by a feeble ridge traceable from near the premedial pubescence to near apex; apices separately rounded and finely denticulate; surface with a fine scalose derm showing pubescence towards sides and apex. *Dimensions*: 9 x 2.5 mm.

Hab.—Queensland: Townsville (F. P. Dodd). A pair long since obtained from the famous naturalist to whom it is dedicated is apparently undescribed and absent from the British Museum collections. The pale pubescence occupies depressions and makes a faint pattern, unlike that of other known Australian species.

Type in Coll. Carter.

AGRILUS BISPINOSUS, n.sp.

Head and pronotum metallic greenish-copper, the former fiery copper on front, the latter with a large reniform patch of golden flocculence filling the lateral depressions; elytra, underside and appendages dark blue or blue-black, the first with two small medial golden pubescent spots situated on the concave area, one on each side of suture, and two preapical more elongate and nearer the suture than the former two; the prosternal episterna and four large patches on abdomen also with golden flocculence (two on the exposed dorsal surface at the lateral medial expansion, and two on sides of 3rd ventral segment, continued on dorsal area).

Head sharply excavated and channelled between eyes, the frontal area somewhat elevated above the eyes with a marked lateral carina; eyes large and prominent, extending laterally beyond the apex of prothorax, finely rugose punctate. *Prothorax*: apex feebly, base strongly bisinuate, sides nearly straight, slightly narrowing from base to apex, sides with a large deep circular, depression not extending to base, a large medial depression not quite extending to apex and widening near base, surface transversely rugose. *Scutellum* triangular, its fore part transversely carinate, depressed behind. *Elytra* slightly wider than prothorax, the humeral callus forming the extension of longitudinal ridge traceable to apex and produced behind into two sharp spines, base foveate within humeral ridge, sub-sutural concavity evident from near middle to apex, the suture itself carinate; apices denticulate on each side of spines. Underside lightly punctate. *Dimensions*: 11 x 3 mm.

Hab.—Queensland: S. Johnstone River (H. W. Brown). A single specimen received from its captor is unlike any described Australian *Agrilus*, though ap-

proximating the former species (*A. doddi*), from which it differs widely in ground colour, underside, and form, especially as to apex of elytra.

Type in Coll. Carter.

N.B.—*Agrilus flavotaeniatus* Thoms. is evidently a form of the wide-spread *A. australasiae* C. and G.

The following list contains the previously described Australian species:

- | | |
|----------------------------------|----------------------------------|
| 1. <i>australis</i> Thoms. | 4. <i>deauratus</i> Macl. |
| 2. <i>aurovittatus</i> Hope. | 5. <i>frenchi</i> Blackb. |
| 3. <i>australasiae</i> C. and G. | 6. <i>mastersi</i> Macl. |
| <i>hypoleucus</i> C. and G. | 7. <i>nitidus</i> Kerr. |
| <i>assimilis</i> Hope. | 8. <i>terrae-reginae</i> Blackb. |
| <i>purpuratus</i> Hope. | 9. <i>zonatus</i> Kerr. |
| <i>flavo-taeniatus</i> Thoms. | |

AGRILUS SEMIVIRIDIS, n.sp.

Head, pronotum, basal half of elytra, legs and antennae emerald green, apical half of elytra bronze, the bronze continued also narrowly along sides to shoulders; suture near apex narrowly bordered with whitish villose clothing; underside bronze, sometimes green on sternal areas. *Head* minutely rugose, furrowed on vertex only; antennae extending considerably beyond the head. *Prothorax*: apex a little advanced in middle, base lightly bisinuate, sides sinuously widened at base, thence subparallel, or lightly converging to apex, a short lateral carina on basal half; posterior angles subacute, medial furrow well-marked throughout, widening towards base, disc transversely striolate. *Elytra* at shoulders slightly wider than prothorax, sides compressed behind shoulders, sharply attenuated towards apex, each elytron separately convex and the suture carinate on apical half, each apex separately, but rather finely rounded, not serrate, underside minutely punctate. *Dimensions*: 3.5-4.5 x 1-1.5 mm.

Hab.—Queensland: Cairns (H. Dodd), Johnstone River (H. W. Brown); New South Wales: Tweed River (W. W. Froggatt). Eleven examples of this pretty little species under examination; it is apparently not uncommon. A pair examined by Mr. K. G. Blair were labelled as "resembling *A. semi-aeneus* Deyr.," a species described from Borneo. The following characters from Deyrolle's description are inconsistent with identity: (1) greater size ($6\frac{1}{2} \times 1\frac{3}{8}$), (2) Elytra "armées chacune d'une longue épine," (3) "dessous vert doré brillant." Of these (2) seems decisive.

Type in Coll. Carter.

AGRILUS NIGRITUS Kerr.—Specimens from the S. Johnstone River, Queensland, taken by Mr. H. W. Brown were compared with Kerremans' type in the British Museum and found to be inseparable from it. The type was described from Banguay, an island north of Borneo.

AGRILUS BREVIS, n.sp.

Concolorous, brownish-bronze, glabrous, pronotum more nitid than elytra; rather wide and flat. *Head* finely rugose, widely furrowed throughout, eyes large and prominent, antennae short, scarcely extending beyond head. *Prothorax* transverse, lightly advanced in middle at apex, base lightly bisinuate, sides nearly straight, lateral carina very short, extending less than half-way from the posterior angle; this rectangular; disc with large foveate depression near middle at base and two latero-basal depressions; surface with fine transverse striolations. *Elytra*

of same width as prothorax at base, lightly compressed behind shoulders, moderately attenuated behind, each apex separately rounded, without serrations; surface with scale-like punctures. Epipleuræ coarsely and closely, abdomen very finely punctate. *Dimensions*: 4 x 1.5 mm.

Hab.—Queensland: Johnstone River (H. W. Brown). Two examples examined are shorter, wider and less convex than other species of *Agrilus* known to me, but I cannot specify any structure that is inconsistent with its generic classification.

Type in South Australian Museum.

SYNECHOCERA Deyr.—So far, two Australian species have been described: *S. elongata* Thoms. and *S. tasmanica* Théry. I think I have determined Thompson's insect in specimens from South and Western Australia in the Adelaide Museum. Macleay's *Aphanisticus occidentalis* is another species and probably my *A. albo-hirtus* is a fourth, but I have no example at hand for examination. The genus is characterized by a flat, elongate, subparallel form, elytra rounded behind, and by an abnormal structure of the sternum. The antennæ are toothed from the 5th segment. Three new species are described below.

APHANISTICUS Latr. belongs to another group of the Agrilini (Trachytes) characterized by a convex body, attenuated behind, tarsi short, the antennæ having the apical three or four joints forming a club. Four species have been catalogued: *canaliculatus* Germ., *lilliputanus* Thoms., *occidentalis* Macl., and *albo-hirtus* Cart. Of these, the first is synonymous with *Paracephala pistacina* Hope, the second is a mystery, but will probably prove to be a *Germarica*, while, as stated above, the last two should be, I consider, referred to *Synechocera*. If I am correct in this, the two described below are the only known Australian species.

SYNECHOCERA CYANEIPENNIS, n.sp.

Elongate-oblong, depressed, subnitid; head, pronotum and underside black, elytra a rich violet blue, antennæ reddish. *Head* bulbous, divided medially by a deep, narrow sulcus, eyes occupying almost whole side of head, but only a narrow section visible from above; front pitted with large shallow punctures, antennæ short, the last four segments serrate. *Prothorax* transversely oval and flat; apex rather strongly advanced in middle; anterior angles unseen from above; base strongly bisinuate, the middle lobe widely rounded and deep, posterior angles widely obtuse; sides arcuately and strongly widening to near apex, then somewhat abruptly narrowed and depressed; a horizontal explanate margin throughout; disc with a longitudinal, oval depression occupying a large part of medial area, the whole disc minutely and densely striolate. *Scutellum* transversely triangular, punctate. *Elytra* rounded and widened at shoulders, sides parallel, apices separately rounded, a narrow, black, horizontal margin extending from base to apex, this margin narrowed and sub-carinate at base; whole surface pitted with large shallow punctures on a minutely rugose or striolate ground; a sub-obsolete ridge faintly seen, extending from humeral region along middle of each elytron. Underside glabrous and nearly impunctate. *Dimensions*: 4 x 1 + mm.

Hab.—Queensland: Atherton (A. M. Lea). Six examples of this pretty little insect, taken by Mr. Lea from a shrub (unspecified), are the only specimens I have seen. The pronotum at its widest is at least as wide as, or slightly wider than, the elytra.

Type in South Australian Museum.

SYNECHOCERA SETOSA, n.sp.

Elongate, cylindrical, black, clothed above and below with short white setae. *Head* sub-bilobate, widely excavated and deeply channelled. *Prothorax* clearly wider than head, lightly bisinuate at apex, strongly so at base, sides moderately rounded, widest at middle, all angles bluntly rounded off; disc without fovea, a medial line indicated only by absence of setae in one example. *Elytra* more than three times as long as prothorax and of about the same width as it; very slightly compressed in middle, apices separately rounded; surface irregularly and closely scaly-punctate throughout, each puncture bearing a short recumbent hair. Abdomen clothed with longer hairs. *Dimensions*: 4.5 x 1.1 $\frac{1}{4}$ mm.

Hab.—Swan River, W.A. (Mr. J. Clark). Two examples generously given me by the captor show a species distinct from *occidentalis* Macl. by its excavate head, its much narrower prothorax and the absence of elytral ridge. *A. albohirtus* Cart. is bronze, with a convex forehead, the sides of prothorax subsinuate behind, hind angles sub-explanate, the elytral apices forming a single curve, etc.

Type in Coll. Carter.

SYNECHOCERA (?) CUPRIPES, n.sp.

Very elongate and narrow; head, antennae, sternum and legs metallic coppery (head, antennae and tibiae greenish-coppery) abdomen bluish, pronotum and elytra blue-black. *Head* very wide, eyes large and prominent, forehead moderately excavated and finely channelled and punctate. *Prothorax* of same width as head at apex, gradually narrowing to base, sides nearly straight, apex strongly bisinuate, base quadrisinuate—the middle lobe itself bisinuate to receive the scutellum; disc very uneven, a large elongate oval fovea on front half (framed in front by medial extension), a transverse depression on basal half, enlarged triangularly in middle, the apex of triangle near basal margin of pronotum, and again enlarging on sides, thus leaving two oblique raised areas near base; the raised portions of disc nitid and impunctate, the rest very finely punctate like the head. *Scutellum* transverse, oval. *Elytra* of same width as prothorax at base, and three and a half times as long; compressed in middle, apices widely and separately rounded off showing serrations on rounded margins and a short external tooth on each. Surface finely scaly-punctate and setose, with fine and close white hairs along medial area, a feeble ridge running obliquely from shoulders towards middle, thence parallel to suture and obsolete towards apex. Underside minutely punctate and setose. *Dimensions*: 7 x 1 $\frac{1}{4}$ mm.

Hab.—Queensland (Mr. H. W. Brown) and Cairns (A. M. Lea and A. P. Dodd). Five examples examined may ultimately be found to need generic distinction. The narrow, compressed form, especially of the elytra, suggests the genera *Macrones* and *Enchoptera* of the Cerambycidae. The sub-trapezoidal pronotum with its uneven surface, its attenuate form and dentate apices separate it from other Australian species, though showing some affinity with *S. albohirtus* Cart. in the form of head and prothorax.

Type in Coll. Carter.

APHANISTICUS ENDELOIDES, n.sp.

Elongate, subcylindrical, nitid bronze. *Head* elongate, glabrous and minutely punctate with deep triangular cleft; extending on the upper surface for two-thirds of its length, eyes rather flat on the outside of the cuneate lobes formed by the cleft, a short sulcus at the base of each lobe; antennal cavities very closely set on each side of the pointed and triangular epistomal process, the antennae at rest

lying alongside this and extending but a short distance ($\frac{1}{3}$) of the prothorax, the last 3 joints of antennae lamellate. *Prothorax* trapezoidal, apex and base nearly equally wide and wider than the head, apex truncate, base strongly bisinuate, sides moderately rounded with greatest width in front of middle, narrowed and slightly sinuate behind, margins explanate, especially at base, densely, minutely punctate, anterior angles depressed and blunt, posterior obtuse; the disc consisting of strongly convex areas, intersected by three wide transverse depressions, the first sinuous behind the apex, forming a depressed collar (giving the raised area behind it the effect of a bisinuate pseudo-margin), the second straight post-medial, the third following the outline of the base. *Scutellum* minute, round. *Elytra*: base widely bilobed, sides sinuate, arcuately enlarged behind shoulder, compressed before middle, narrowed behind to a pisciform apex (arcuately excised behind two external teeth); each with about three rounded costiform impressions becoming flatter towards apex, the intervals with large punctures, more or less seriate. Prosternum with middle area in the form of an elongate trapezium with its apex wider than the base, meso- and metasternum with sparse coarse punctures, abdomen sparsely punctate, the punctures smaller near apex, last segment truncate; under surface of tarsi forming a wide tomentose pad. *Dimensions*: $3\frac{1}{2}$ -4 x 1 mm.

Hab.—North Queensland: Cairns (Coll. Carter, Lea and Macleay Mus., also National Museum, Melbourne). Some carded specimens were given me some years ago as an *Agrius* by the late Mr. Masters. Thinking it likely to be allied to Papuan forms, I carefully went through allied species in the British Museum collection and find that it is quite close (except in colour) to *A. mitratus* Chev., a Madagascar species. Its widely cleft head separates it from other known Australian Buprestidae. The following is another of a similar structure.

Type in Coll. Carter.

APHANISTICUS BROWNI, n.sp.

Differs from preceding as follows:—Shorter and wider; colour black nitid. *Head* more widely cleft (as seen from above, terminating behind in an oval, not a triangular excision), the eyes more prominent, antennae longer, the last four joints with short lamellae. *Prothorax* wider, the raised parts less convex, the medial transverse depression subobsolete (a mere scratch), the apex more sinuate, lateral foliation wider, sides more widely rounded, with greatest width at, or behind, the middle; anterior angles acute, posterior obtuse. *Scutellum* larger and triangular. *Elytra* wider and flatter, sides less sinuate, anterior half subparallel, thence obliquely narrowed, with feeble sinuation near apex; apices separated at suture, each subtruncate; striate-punctate, punctures foveate and shallow, intervals flat. The suture is sub-carinate near apex. Anterior and mid-tibiae curved, abdomen nitid and apparently impunctate. *Dimensions*: $2\frac{1}{2}$ -3 x 1 mm.

Hab.—Queensland: South Johnstone River (H. W. Brown). Mr. Brown has generously given me five of this interesting novelty, which he took in some quantity.

Type in Coll. Carter.

TENEBRIONIDAE.

Platydema sulcato-punctatum Cart.—Two examples, evidently the sexes, of this species are amongst some Tenebrionidae lately examined from Moa, Banks' Island, Torres Straits. I am thus able to add the following notes to my description and to make a correction (These Proceedings, 1922, p. 73): (1) The unique type is a ♀ (not ♂ as stated). The ♂ has two conical horns arising from the base of head, each of which is surmounted by two spinose bristles. In the ♀ the horns are replaced by longitudinal ridges which are punctured like the rest of the head;

(2) The ♂ example has some rufous markings, probably variable and inconstant near the base of the elytra, somewhat as in *P. rufibase* Cart., which is, however, quite differently sculptured. The ♀ example from Moa is identical with the type, and I have no doubt as to the two examples from Moa being conspecific.

Saragus marginellus Hope = *S. rudis* Macl. I have examined the Hope type, and at once recognized the Macleay species.

Amphianax sub-coriaceus Bates = *Agasthenes goudiei* Cart. = *A. euclensis* Cart. An examination of Bates' type makes the first synonymy certain, the second was recorded previously. This raises the question of the differentiation of the genera *Amphianax* and *Agasthenes*. An examination of the genotypes shows, to my mind, specific distinctions only, while some of the details of the author's descriptions are misleading. Thus, under *Amphianax*, he states "sides of submentum not dentiform" whereas I find, as stated in my description of *A. goudiei*, "tooth of submentum small and conical." The same is true of *A. frenchi* Cart. Again, of the tibiae of *Agasthenes*, the author says "the anterior with a single spur," whereas there are two, one being very small. Eliminating these distinctions, there is little to discriminate between the genera, which are, I consider, synonyms. The name *Agasthenes*, appearing two pages later is thus redundant. Thus *Amphianax* Bates = *Agasthenes* Bates.

Onosterrhus sculpturatus Blackb. and *O. veterosus* Blackb. An examination of the unique types of these species shows a very close likeness. Further material is necessary before establishing their relationship, but it is worth while to call the attention of other workers on the group to the possible identity of these two.

The genus *Brises* Pasc. is sufficiently distinct from the Tenebrioninae and the Cyphaleinae to warrant the establishment of a separate subfamily, Briseinae, for its inclusion, for the distinctive characters of which see my "Revision of the Tenebrioninae" (These Proc., 1914, pp. 45, 46).

Moerodes kershawi Cart.—This species is really out of place under *Prophanes*, where I suggested it should stand (These Proc., 1917, p. 718). Its punctate-striate elytra place it more suitably under *Platyphanes*.

Adelium.—The vast number and wide range of many species of this family is associated with a correspondingly wide variation. I now consider the following synonymy as established:—

(a) *A. pilosum* Pasc. = *A. scutellare* Pasc.

(b) *A. reductum* Pasc. = *A. aucilla* Pasc. = *A. convexiusculum* Macl. = *A. nitidum* Cart.

(c) *A. similatium* Germ. = *A. obesum* Pasc. (var.); while the identity of *A. aerarium* Pasc. with *A. augurale* Pasc. is open to suspicion. The type of the former, compared with that of the latter, shows brighter colour, and a sculpture on the middle area that may be described as a rectangular reticulation, rather than linear-costate.

(a) The range (from specimens before me) is Allyn River, Armidale, Dorrigo, Tenterfield, Narrabri, Brisbane.

(b) Has a similar wide range over Northern New South Wales, and an even wider range in Queensland.

(c) I have seen *A. obesum* only from Victoria.

Micretyche ferruginea Bates = *M. ryei* Bates (Types examined).

HETEROCHEIRA TROPICA, n.sp.

Ovate, nitid black or brownish above, under side and appendages dark castaneous. Head densely, minutely punctate, antennae not extending beyond half

the length of prothorax, joints 8-10 transverse, 11 subspherical. *Prothorax*: apex subtruncate, base lightly bisinuate, widest at base, thence arcuately narrowed to apex, front angles obtuse, hind rectangular, disc very minutely punctate, the punctures finer than on head. *Scutellum* large, equilatero-triangular. *Elytra* rather wider than prothorax at base, slightly obovate, with greatest convexity and width behind middle; striate-punctate, with small punctures half hidden in deep striae, intervals wide, nearly flat on basal half, clearly convex behind and sublaevigate (the minutest punctures discernible under a Zeiss binocular); prosternum nearly smooth on medial area, elsewhere, as also the meso- and metasternum, finely punctate, abdomen densely punctate. Tibiae spinose on exterior margins, apices enlarged. Those of the fore tibiae very wide, especially in the ♂. *Dimensions*: 5.6 x 2½ mm.

Hab.—North Queensland: Townsville, sea-beach (G. F. Hill and H. J. Carter). A species I have long had under notice, and which has been compared with possible allies in the British Museum Collection by Mr. K. G. Blair. I took a long series under sea-weed in July, 1921, and have also received it from Mr. G. F. Hill (late of the Institute of Tropical Medicine). Compared with *H. australis* Boisd. (the only other member of the genus), it is wider and more convex, with shorter antennae and legs, the tibiae, especially the fore-tibiae, more enlarged at apex; the upper surface is considerably more finely punctured, the elytral striae are deeper, the intervals less flat.

Type in Coll. Carter.

Note.—In January, 1914, Mr. T. G. Sloane and myself took *H. australis* Boisd. in similar quantity at Cottesloe Beach, near Fremantle, W.A., also under sea-weed. I have a specimen labelled by Blackburn, besides others from Bendin Is., N.W.A. (taken by Commander J. J. Walker) at roots of sea-grass and noted as *varieties* by Champion (Trans. Ent. Soc. Lond., 1894, p. 366). For detailed diagnosis of this species see Bates (*l.c.*, 1872, p. 266).

Diaclina (Heterocheira) nitida Cart. is a flatter insect with a differently shaped head, the base of pronotum more strongly bisinuate, hind tibiae curved, elytra and pronotum highly polished (See also These Proc., 1921, p. 307).

SARAGUS PUNCTATUS, n.sp.

Ovate, moderately convex, subnitid black, margins of pronotum, elytra, as well as of abdominal segments, reddish, antennae and tarsi red. *Head* scarcely, or microscopically punctate, epistoma truncate in front, oblique and revolute at sides, its surface with four raised lines radiating from the forehead, two near middle short and sub-pustulose, the other two obliquely directed outwards from inner margin of eyes, the latter separated by a space of the width of one eye. *Prothorax*: apex arcuate-emarginate, base bisinuate, sides arcuately narrowed to front, rather abruptly and roundly narrowed behind, anterior angles wide and rounded, posterior subfalcate but not overlapping elytra, explanate margins wide and concave, with smooth surface; disc very finely and not densely punctate, nearly smooth at base, middle line indicated by smooth space near base and a short linear impression at apex. *Scutellum* equilatero-triangular. *Elytra* of same width as prothorax at base, thence ovately widened and bluntly rounded at apex, explanate margins smooth, wide on front half, thence narrowed, but moderately wide to apex; disc covered with rows of large, round punctures, the intervals near suture very irregular and sub-costate, the lines of punctures in this region also irregular, alternate intervals more or less raised, a little crenulate in parts, some-

times with an irregular transverse connection. *Prosternum* carinate, and pustulose, mesosternum with sparse fine pustules near sides, abdomen minutely punctate. *Dimensions*: 11 x 7 mm.

Hab.—New South Wales: Shoalhaven River (Taylor Coll. in Australian Museum). The specimen examined is nearest to, but very distinct from, *S. rugosipennis* Macl. (from the region south-west of Shoalhaven), differing from that species chiefly as follows: (1) Form rather shorter and wider, (2) Surface more nitid, (3) Explanate margins nowhere with any sign of corrugation, (4) Pronotal punctures very fine and rather distant (close and much coarser in *rugosipennis*), (5) Elytral punctures much more and transverse rugosity much less defined than in Macleay's species. Type (No. K. 44721) in Australian Museum.

NYCTOZOILUS CRASSUS, n.sp.

Widely ovate, convex body and appendages subnitid black, tarsi and apices of tibiae clothed with red tomentum. *Head* finely and densely punctate, antennae stout, apical half opaque and hirsute, joint 3 as long as 4-5 conjointly, 4-7 obconic, 8-10 nearly round, 11 ovate, $1\frac{1}{2}$ times as long as 10. *Prothorax* arcuate-emarginate at apex, anterior angles prominent, bluntly sub-acute, base nearly straight for the greater part, a little sinuate before the backwardly-produced dentate hind angles, these overlapping elytra, widest a little behind middle, sides thence subangulately narrowed, arcuately in front, lightly sinuate behind, raised lateral border strongly thickened and round, widely concave within, this gutter smooth; disc closely finely punctate with a faint indication of a smooth medial line and a large foveate depression on each side of this. *Scutellum* transversely triangular, punctured like pronotum. *Elytra* as wide as prothorax at base and less than three times as long, widening rapidly from shoulders to half way; each with four wide and slightly flexuous costae, the inner three nitid, the fourth, near margin, opaque and less raised than the rest; the first and second costae adjacent but scarcely meeting at base, 3rd and 4th meeting at shoulders; transverse ridges irregularly branching from the costae, the interstices thus being irregularly ridged and foveate-punctate, though without defined reticulation, the sculpture becoming vague and sub-obsolete on the steep apical declivity, the sutural ridge less raised than costae; the usual lateral row of large punctures evident on basal half; under side finely, not very closely, punctate. *Tibiae* straight. *Dimensions*: 16 x 9 mm.

Hab.—New South Wales: Uralla (Dr. E. W. Ferguson). A single male example shows a distinct species which, by the combination of punctate, thickly margined pronotum and 8-costate elytra, is nearest to *N. marginatus* Cart., from which it differs in smaller size, shorter and proportionally wider form, the sides of pronotum sinuate behind, the lateral gutter not rugose, *inter alia*.

Type in Coll. Carter.

NYCTOZOILUS PUSILLUS, n.sp.

Oblong ovate, opaque brownish-black, apical joints of antennae piceous, of palpi red; tarsi and apices of tibiae clothed with golden tomentum. *Head*: epistoma concave in front, labrum very prominent and ciliate, whole surface (including prominent canthus) densely rugose-punctate, antennae moderately enlarging outwards, joint 3 as long as 4-5 conjointly, 4-8 oval, 9-10 short and transverse, 11 ovoid. *Prothorax*: apex arcuate-emarginate, base nearly straight, a little sinuate near angles, widest behind middle, sides thence roundly narrowed to the acute front angles, sinuately narrowed behind to meet the lightly produced, but

scarcely dentate hind angles, these overlapping elytra; a thin raised lateral border, lightly concave within; disc very densely punctate, the punctures smaller than on head, without rugosity; a smooth medial line shown near middle and a shallow depression on each side of this. *Scutellum* transversely triangular, punctured like pronotum. *Elytra* oblong, obovate, with four thin, nitid, sub-undulate costae, besides the wider but less raised sutural convexity, the interstices showing shallow irregularities of surface; the whole densely punctate, the punctures showing distinctly along the narrow costae; costae one and two meet on apical declivity but not at base, the third and fourth meet at both extremities of their length; a posterior loop on the declivity, connecting the junctions of 1-2 and 3-4. The lateral margin without any sign of the usual row of large punctures. Prosternum rugose-punctate, the rest of under side densely punctate (more coarsely so than the upper surface) the abdomen also longitudinally strigose. *Dimensions*: 12 x 6 mm.

Hab.—Queensland: Rockhampton. A single example, probably male, has long been, in my collection, wrongly determined as *N. daemeli* Haag. and figured in outline under this name (These Proc., 1917, p. 706), when I described *N. parvus* from Townsville. Last year, however, it was compared with a specimen of *daemeli* in the British Museum, and found to be distinct by its narrower oblong form, the less acutely produced hind angles of prothorax, and differently sculptured elytra. (In *daemeli* Haag., there are obvious transverse rugosities while the interstices are as described "vix punctatis"). It is thus possible that *N. parvus* Cart. is identical with *N. daemeli*. The unique type of *parvus* is in the National Museum, Melbourne. My outline figure of *parvus* is not unlike that of *daemeli*, as given by its author.

Type in Coll. Carter.

MENEPHILUS PULCHER, n.sp.

Elongate, parallel, upper surface brilliant peacock blue-green, elytra with three lateral intervals on apical half gold; antennae, legs and underside red. *Head* strongly and closely punctate, epistomal suture arcuate, antennal joints 1-4 unusually fine, three terminal joints strongly enlarged, joint 8 intermediate in size between 7 and 9. *Prothorax*: apex and base subtruncate, the latter feebly produced in middle, sides nearly straight, wider in front than behind, narrowly margined at base and sides, anterior angles widely rounded, posterior sharply defined but obtuse, disc clearly and rather closely punctate, middle line indicated near base by less punctate area. *Elytra* wider than prothorax at base, shoulders rounded, sides parallel; striate-punctate, striae deep, the punctures therein slightly crenulating the sides of the convex intervals, the latter finely punctate and sharply carinate at apex. *Sternum* nearly smooth, abdomen wanting. *Dimensions*: 10 x 4 mm.

Hab.—North Queensland: Deeral? (Dr. J. F. Illingworth). An example generously sent me by its captor, and a second shown me in London by Dr. G. A. K. Marshall, who had also received it from Dr. Illingworth, can only be confused with *M. lactus* Cart. and *M. corvinus* Eriehs. by colour and size. Smaller than either, it is easily distinguished by (1) the golden sides of elytra, accentuated (in the type) by the purple-blue horizontal margin, (2) straighter sides of prothorax, (3) the more strongly punctured surface, (4) more convex elytral intervals, and (5) especially by the different antennae, which in *lactus* and *corvinus* are more gradually enlarged externally. The abdomen is, unfortunately, wanting, but the type is otherwise in good condition.

Type in Coll. Carter.

NOTOPRATAEUS (gen. nov. Heterotarsinorum).

Ovate, winged; eyes large, transverse, coarsely granulated; antennae long (about extending to base of prothorax when at rest), joints enlarging outwards, the last three considerably larger than the rest; maxillary palpi long, apical joint securiform, mentum and labial palpi small, mandibles simple, epistoma scarcely separated from front by suture; prothorax not concealing eyes, wider than head, base and apex of nearly equal width, both bisinuate; sides not explanate, with narrow entire border. Elytra coarsely irregularly punctate; epipleurae narrow; prosternal process received into a deep triangular notch of the mesosternum; procoxae globose, middle coxae with trochantins, postcoxae rather widely separated by a triangular intercoxal plate; apices of tibiae not enlarged and each bearing two short spines; tarsi with silky-pubesence beneath, penultimate joint bilobed, claws small; posterior tarsi with first and fourth joints of equal length, each as long as the second and third conjointly, the latter two of equal length.

This is the first record of a genus of the tribe *Heterotarsini* in the Australian fauna. According to Mr. K. G. Blair, it is near *Paratenetes*, but following Leconte and Horn (Col. N. Amer.) it would appear to be still nearer the American genus *Prataeus*.

NOTOPRATAEUS LITORALIS, n.sp.

Narrowly oval and rather flat; nitid black, sparsely clothed at sides, more densely beneath, with pale, short bristles; antennae, palpi and tarsi red. *Head*: epistoma widely rounded, slightly produced in the middle; mandibles and labrum prominent; coarsely, not closely punctate; antennae with joints 1-2 short and stout, 3 half as long again as 4, 4-6 longitudinally ovate, 7-8 pear-shaped, as wide as long, 9-10 transversely oval, 11th largest, sub-globular. *Prothorax* transverse quadrangular, apex more sinuate than base, front angles widely rounded, sides rounded, widest at middle, lightly sinuate on basal half, posterior angles sharply rectangular, disc coarsely punctate without sign of medial line, basal or other foveae. *Scutellum* triangular, smooth. *Elytra* distinctly wider than prothorax at base and $2\frac{1}{2}$ times as long, humeral angle obtuse, showing a narrow epipleural fold, a narrow border evident from above for two-thirds of length; coarsely, irregularly punctate, each puncture, where not abraded, bearing a short hair; under side more densely setose-punctate. *Dimensions*: 4 x 1.6 mm.

Hab.—N. Queensland: Townsville (H. J. Carter). I took a single example of this interesting species in company with *Heterocheira tropica* on the beach.

EUTOREUMA MINOR, n.sp.

Elongate, convex, nitid coppery-bronze above, reddish-brown beneath, antennae, tibiae and tarsi red. *Head* densely punctate, forehead canaliculate, eyes large, half-concealed by prothorax, separated by a distance about equal to the diameter of one eye; antennae slender, about reaching base of prothorax, apical joints lightly enlarged. *Prothorax* arcuate-emarginate at apex, anterior angles acute and prominent (extending in front of eyes); base strongly bisinuate, posterior angles acute, sides lightly arcuately widened from apex hindwards, the arcuation strongest near front; a thin raised lateral border, narrowly sub-concave within; a medial and two larger foveae near base; disc closely and rather strongly punctate. *Scutellum* triangular with rounded sides, punctate. *Elytra* of same width as prothorax at base, sides subparallel for the greater part; apical half more tumid and convex than basal half; disc irregularly vermiculate-punctate,

with bladder-like swellings irregularly disposed, interspersed with foveate punctures; of these, some longitudinally arranged near suture on apical third; whole surface also with a close minute system of punctures; prosternum finely punctate, abdomen longitudinally strigose. *Dimensions*: 7 (plus) x 3 mm.

Hab.—S. Queensland: Coomera (Mr. R. Illidge). A specimen was generously given me by its captor some years ago and then diagnosed as a *Mithippia*. It is, however, in structure, sculpture and colour extremely like its only congener, *E. cupreum* Cart., from which it differs as follows:—Size much smaller, pronotum more closely and coarsely punctate, with the lateral border much finer, the anterior sides more arcuate. The elytra also show a more distinct system of ground punctures.

Type in Coll. Carter.

CHARIOTHES DODDI, n.sp.

Rather widely ovate, moderately convex, head, pronotum, underside and legs nitid black, elytra bright violet, antennae, palpi and tarsi red, the last clothed beneath with long yellow hair; the penultimate joint with a tassel of the same. *Head* finely, closely punctate, epistoma with rounded depression on each side, antennae with joint 3 longer than 4, joints 7-11 transverse, 11 largest, ovoid. *Prothorax* transversely convex, apex feebly sinuate, the middle very little prominent, anterior angles widely obtuse and depressed, base lightly bisinuate, posterior angles sub-rectangular; sides rather widely rounded, widest in front of middle and without sinuation, lateral border narrow, disc finely, sparsely punctate. *Scutellum* small, triangular. *Elytra* ovate, slightly wider than prothorax at base, striate-punctate, the striae well-marked and deeply furrowed at apex, the punctures small, half-concealed in striae on basal half, obsolete at apex, intervals convex throughout, strongly so behind, also impunctate, the suture carinate on apical third. Gular area transversely rugose, prosternum coarsely punctate, its apical process with deep longitudinal sulcus; abdomen strongly punctate except on two apical segments, here sub-obsolete, all tibiae bowed.

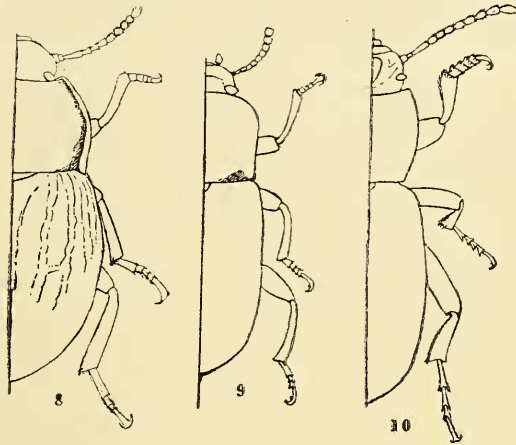
Hab.—N. Queensland: Cairns district (Mr. F. P. Dodd). Another of Mr. Dodd's captures in this region of unlimited entomological supply. It is nearest *C. subviolacea* Cart. in size and colour and differs from it as follows:—General surface, especially elytra, more depressed and more widely oval, the pronotum more convex, elytra striate-punctate; the colour of elytra much brighter. It is of quite different form from the sub-cylindric *striato-punctata*, Macl., with more even striation and smaller punctures. It is not very near any of the 30 species recently described by Gebien under the preoccupied name *Chariotheca* (see *These Proc.*, 1914, p. 78) from Papua.

Type in Coll. Carter.

APTEROTHECA PUNCTIPENNIS, n.sp. (Text-fig. 9.)

Robust, ovate; head, pronotum, underside and legs nitid black; antennae and tarsi reddish, elytra violaceous with cyaneous tints near base and suture. *Head*: epistoma impunctate, forehead finely, sparsely punctate; antennae gradually widening outwards, joint 1 concealed by canthus, 7-11 increasingly transverse, 11 longer than 10. *Prothorax* transverse and convex, apex and base subtruncate, front angles depressed and widely rounded off; hind angles acute, emphasized by the meeting of the basal and lateral margins; widest at middle, sides well rounded, subsinuate behind; a narrow, raised lateral border; a transverse depression within basal margin; disc microscopically punctate. *Scutellum* arcuate-triangular.

Elytra of same width as prothorax at base, convex and oval; striate-punctate, with 8 rows of large punctures connected by shallow striae, besides a short scutellary row of about 3 punctures; seriate punctures not very close, 4 punctures (two in adjacent rows) forming a square, intervals flat and impunctate. Gular region transversely striolate. sternum and abdomen finely punctate, the metasternum and first segment of abdomen with fine longitudinal striulations. All tibiae a little curved, hind tibiae of male strongly so. *Dimensions*: 14 x 6 mm.



Figs. 8-10.

8. *Nyctozoilus crassus*. 9. *Apterotheca punctipennis*, ♂.
 10. *Nototrintus hackeri*, ♂.

Hab.—South Queensland, National Park (Mr. H: Hacker). Two examples (♂, ♀) form another of Mr. Hacker's discoveries in this prolific region. This is the third known species of a genus lately separated from *Chariotheca* by Gebien (*Résultats de l'expédition scientifique Néerlandaise à la Nouvelle Guinée*, 1920, p. 348), under its present title. It is readily distinguished by colour and elytral sculpture from *A. amaroides* Pasc. and *A. besti* Blackb. Vide infra), the punctures in the elytral series being as large as in *Encyalesthus punctipennis* Pasc.

Types in Queensland Museum.

The three species may be thus separated:—

A. Pronotum, legs and underside black.

1. Elytra iridescent (purple-cyaneous); very finely striate-punctate.

..... *amaroides* Pasc.

2. Elytra deep violet (less nitid than 1). strongly striate-punctate.

..... *punctipennis*, n.sp.

AA. Pronotum, legs and underside blue.

Elytra fiery coppery. *besti* Blackb.

(Blackburn deduced from Pascoe's omission that the elytra of *amaroides* were not striate. I have a cotype, however, from Lizard Is., given in exchange at the British Museum, which shows a fine striation, containing small punctures).

I have already noted (*Proc. Linn. Soc. N.S.W.*, 1911, p. 215) the differentiation of the two groups of *Otrintus*. I now propose the generic name *Noto-*

trintus for the reception of *O. jacksoni* Cart., *O. striatus* Cart. and *O. acaciensis* Cart., of which the first is the genotype.

NOTOTRINTUS (gen. nov. Adeliinarum).

Near *Otrintus*, but separated from it by the flatter, non-cylindric form, prothorax trapezoidal or sub-cordate; widest near apex, base truncate or lightly arcuate, hind tarsi long. Elytra sulcate. In *Apasis*—another allied genus—the apex of pronotum is not emarginate, the front angles depressed and rounded, while in *Nototrintus* they are more or less explanate and emarginate, and quite sharply emarginate in *Otrintus*. The following adds another species to the group.

NOTOTRINTUS HACKERI, n.sp. (Text-fig. 10.)

Oblong ovate, subnitid black; antennae and tarsi piceous, the latter clothed beneath with red tomentum. *Head* strongly, not closely punctate, eyes rather narrowly transverse, antennae extending to base of prothorax in the male (not quite so far in the female); joint 3 half as long again as 4; 4-10 oval, very slightly progressively enlarged, 11 longer than 10, ovate acuminate. *Prothorax*: apex arcuate, anterior angles sub-rectangular with the extreme apex blunt, base truncate, posterior angles defined and obtuse; sides arcuately converging from near apex, subsinuuous near hind angles; all angles a little explanate, the explanation extending narrowly along sides, extreme border narrowly raised throughout; a fine medial line clearly cut, whole disc closely and finely punctate. *Scutellum* rather widely triangular. *Elytra* oblong ovate, shoulders widely rounded, epipleural fold well raised in this region; sulcate, with 10 rather deep sulci, including the extreme lateral one, intervals carinate towards base and apex, and becoming sharper laterally, everywhere convex. Underside smooth and nitid, hind tarsi having first and fourth joints subequal in length. *Dimensions*: 16-17 x 5.5 mm.

Hab.—Queensland: National Park (Mr. H. Hacker). Five examples sent by Mr. Hacker show the largest and most nitid of the four species. The single male differs from the female in having greatly enlarged front tarsi, widened tibiae, the hind tibiae rather strongly curved and in having longer antennae. I am pleased to name this insect after the enthusiastic and capable entomologist who is doing such admirable work at the Queensland Museum.

Types in the Queensland Museum.

The following table will distinguish the four known members of the genus.

Nototrintus.

- 1-3. Colour opaque brown-black.
2. Pronotum subcordate, elytral intervals sharp, 12-14 mm. long. *striatus* Cart.
3. Pronotum narrower, elytral intervals rounded, 16-17 mm. long. *jacksoni* Cart.
- 4-6. Surface nitid.
5. Colour brown-black, elytral intervals clearly punctate, 13-15 mm. long.
..... *acaciensis* Cart.
6. Colour black, elytral intervals impunctate, 16-17 mm. long. *hackeri*, n.sp.

N.B.—All four species are denizens of the dense brush of the regions limited by the Bellinger River and the Queensland National Park, MacPherson Ranges.

LICINOMA PUNCTICEPS, n.sp.

Subcylindric, nitid black, labrum, palpi, antennae and tarsi red, apical joints of antennae pale red. *Head* with epistoma unusually elongate, its sides obliquely narrowed to front, the whole forehead and epistoma very coarsely punctate, antennae with joint 3 a little elongate, 4-10 moniliform and slightly enlarging outwards, 11 much larger and pear-shaped. *Prothorax*: apex and base subtruncate, anterior angles feebly emarginate and obtuse; widest before middle, sides lightly rounded and narrowly margined, disc strongly and unevenly punctate, the punctures smaller than on head and becoming finer near middle, a foveate impression towards each side; without sign of middle line. *Scutellum* small. *Elytra* slightly wider than prothorax at base; striate punctate, the striae wide and deep, almost concealing the punctures; intervals flat, very minutely punctate but not setose, the 1st, 3rd, 5th, and 7th wider than the rest. *Prosternum* and sides of *mesosternum* coarsely, metasternum and abdomen finely (the apical segment densely) punctate. *Dimensions*: 11 x 4 mm.

Hab.—New South Wales: Bowral. A single specimen probably taken by the late Mr. Helms, is clearly differentiated from its nearest ally *monticola* Blackb. by its elongate head and the unusually coarsely punctate head and pronotum in combination with flat, non-setose elytral intervals of unequal width.

Type in Coll. Carter.

LICINOMA UMBILICATA, n.sp.

Oblong oval, pale bronze, subnitid, underside, legs and apical half of antennae red, basal half of antennae, tarsi and upper part of tibiae testaceous. *Head* finely punctate, epistomal suture arcuate, antennae with basal joints linear-ovate, 6-11 gradually enlarged, 11 not much larger than 10. *Prothorax* arcuate-emarginate at apex, base sub-truncate, sides rather widely and evenly rounded; anterior angles a little rounded and subacute; posterior obtuse; disc with fine, close, shallow punctures, two foveate depressions near middle, one on each side of middle line, the latter lightly impressed at apex, widening into a pear-shaped fovea at middle, thence obsolete. *Scutellum* triangular. *Elytra* ovate, widest about middle, shoulders obsolete; striate-punctate, the striae well-marked, the seriate punctures small and close, intervals quite flat, the 3rd, 5th, 7th and 9th with umbilicate nodules; in general * each bearing a coarse spinose oblique bristle; the 3rd having about five, the 5th about seven, the 7th about eleven, more or less evenly spaced, those on the 9th appearing in outline at the sides. Underside finely punctate; hind tarsi with basal joint about as long as the rest combined. *Dimensions*: 8 x 3 (+) mm.

Hab.—Dorrigo (Mr. S. W. Jackson). A puzzling species that on a strict interpretation of Pascoe's phrase "*prothorax* apice haud emarginato" would require separation from *Licinoma*. It, however, accords with the genus in other respects, while the extent of "emargination" depends somewhat on the point of view. The "arcuation" is slightly deeper than that of *L. aerea* mihi as shown in figure (These Proc., 1920, p. 242, fig. 8). The sculpture of the elytra compared with that of the Tasmanian *L. nodulosa* Champ.; but in this species is feeble, chiefly confined to the apical region, and unaccompanied by setae.

Type in Coll. Carter.

* The unusually coarse spinose bristles are apparently easily abraded, since they are irregularly absent from some of the nodules.

CHALCOPTERUS LUCIDUS, n.sp.

Robust, oval, convex; head, pronotum, underside and legs nitid black, antennae and tarsal clothing black; elytra burnished, pale greenish-copper, very brilliant. *Head*: eyes separated by space nearly equal to the diameter of one eye; antennae robust, little enlarged externally, 3rd joint proportionally longer than in *affinis* Bless. *Prothorax*: apex lightly arcuate, base sub-truncate, front angles depressed and very wide, posterior acute, sides gently arcuately narrowing from base to apex; disc very finely sparsely punctate, medial line smooth. *Scutellum* black, nitid, equilatero-triangular. *Elytra* strongly widened at shoulders, thence sub-parallel to apical third; minutely striate-punctate, the fine shallow striae only seen by close scrutiny, the seriate punctures much smaller than in *affinis* Bless. or *sparsus* Blackb.; intervals flat and impunctate; metasternum and abdomen finely strigose. *Dimensions*: 14.5-15 x 8-8.5 mm.

Hab.—Western Australia: Beverley (Mr. Tepper, Junr.), and N. Territory. A robust species after the manner of *affinis* Bless. and *sparsus* Blackb.; nearer the latter, but distinguished by the larger form, the extreme brilliance of its surface and the absence of any sign of interstitial punctures on the elytra. I have had the species long under observation, but, not having clearly identified *sparsus* until my recent visit to the British Museum, had left it undescribed till now. The colour of elytra is elusive and apparently uniform, or nearly so, but the metallic reflections are decidedly greenish, and there is an entire absence of purple. Two examples, including the type in Coll. Carter, one in the British Museum, others in the South Australian Museum.

CHALCOPTERUS PRAETERMISSUS, n.sp.

Elliptic, convex; head, underside and appendages black, pronotum and elytra green, with metallic purple sheen near hind angles of pronotum, also on humeral callus and sides of elytra. Tarsal clothing yellow. *Head* closely and rather strongly punctate, eyes bordered by sulcus, separated by about the length of 2nd joint of antennae; antennae enlarged towards apex, joints 4-11 subequal in length. *Prothorax*: apex arcuate, base bisinuate, sides well rounded and converging to apex, all angles obtuse; disc irregularly and rather coarsely punctate, the medial line and a few small irregular areas more or less laevigate. *Elytra* regularly elliptic, considerably wider than prothorax, humeral callus prominent; seriate-punctate, punctures in striae near middle very much as in *C. smaragdulus* F. but much less diminishing in size towards apex than in that species; intervals flat and strongly punctate (as in *C. variabilis* Bless.). Underside striolate. *Dimensions*: 13 x 7 mm.

Hab.—N. Queensland (Kuranda). A species long overlooked in my collection, superficially like green examples of *smaragdulus* F., but an examination at once shows the following distinctions: Form more regularly elliptic (in *smaragdulus* the elytra are ovate with the big end at base); eyes less close, ocular sulcus present, punctures of pronotum and elytral intervals much stronger, seriate punctures well-marked to extreme apex; tarsal clothing yellow. The species should be placed in my table (Trans. Roy. Soc. S. Aust., 1913, p. 31) after *rasticus* Blackb. (= *cupreus* F.) from which it differs in smaller size and its strong interstitial punctures.

Type in Coll. Carter.

STRONGYLUM VERTEBRALE, n.sp.

Elongate, subcylindric, glabrous; head, pronotum, scutellum, the greater part of elytra and underside metallic peacock-blue (in one example head and pronotum dark metallic green); elytra with suture, base and margins red, this colour varying in extent, but generally covering one elytral interval at suture and sides and widening towards base and apex. Underside of head, coxal regions, epipleurae and margins of abdominal segments more or less red or suffused with red, antennae and legs blue-black, tarsal claws yellow. *Head*: labrum prominent, forehead coarsely, epistoma more densely and finely punctate, eyes moderately prominent, widely separated, in ♂ by the width of an eye, in ♀ more widely separated. Antennae extending beyond base of prothorax when at rest, joints 1-2 short and stout, 3-5 sub-linear, 3 shorter than 4-5 conjoined, 6-10 subconic, of equal length but widening outwards, 11 oval, as long as 10. *Prothorax* transverse and sub-depressed, apex and base sub-truncate, all angles rounded off, the anterior widely so, sides variably widened, in ♂ examples nearly straight or feebly subangulately widened near middle, in ♀ more widely rounded, a raised border throughout, showing more prominently at apex and middle of base, medial line sometimes indicated by short depression near middle and absence of the coarse, irregular puncturation elsewhere displayed on disc. *Scutellum* arcuate-triangular, the apex rounded off, impunctate. *Elytra* considerably wider than prothorax at base, slightly widened behind middle, shoulders rather squarely rounded, strongly striate-punctate, with nine deeply cut striae, besides a shorter scutellary stria, containing rather large, irregularly-spaced punctures; intervals convex and impunctate, underside almost smooth, the abdomen with light shallow punctures, the episterna with a few larger punctures. *Dimensions*: 8-9½ x 2½-3½ mm.

Hab.—North Queensland (Cooktown, Kuranda, Mackay, etc.). A common species found in most collections (11 examples now before me) that I have hitherto considered as *Pseudo-strongylium viridipenne* Kraatz. The latter species, however (described from a single example) possesses the following characters inconsistent with this determination: "apex of antennae reddish," "joints small and threadlike," "eyes almost adjacent," "tibiae at base and thighs red" (translated from German). Some examples are almost entirely cyaneous, this colour varying from green-blue on head and pronotum to bright violaceous on elytra, in old specimens becoming dingy, while the amount of red is variable. The appendages, except tarsal claws and scutellum, are in all cases dark.

Type in Coll. Carter.

EBENOLUS BANKSI, n.sp.

Oblong, subcylindric; head, pronotum, underside and legs nitid black, elytra green and purple (the former colour predominating on the middle area), antennae piceous, tarsi red. *Head* minutely punctate, strigose on basal ridge, eyes almost contiguous, the interspace in apical half of ♂ narrowly lineate, thence triangulately widening behind; in ♀ the interspace is twice as wide in front and much more rapidly widened behind; in both sexes the widened interspace impressed; antennae long and slender, joints 3-11 successively shorter and slightly wider. *Prothorax* subquadrate, wider than long and rather wider in front than behind; apex, base and sides nearly straight, narrowly margined throughout, anterior angles rounded, posterior rectangular; disc with fine, shallow punctures, with an area of larger punctures near middle of base, medial channel lightly impressed (more strongly so in ♀) on basal half. *Scutellum* equilatero-triangular,

punctate. *Elytra* considerably wider than prothorax at base, shoulders angulate, sides sub-parallel; seriate-punctate, the first two rows of punctures in sub-striate depressions, intervals impunctate and slightly convex, the two first more strongly so; the punctures round, moderately large and regular. Prosternum sulcate, abdomen finely punctate, post-tarsi with 1st joint shorter than the rest combined. *Dimensions*: ♂. 12-13 x 4-4½ mm.; ♀. 13 x 5 mm.

Hab.—Moa, Banks Island, Torres Straits (Mr. W. McLennan). Two ♂ and one ♀ in the Australian Museum, presented by Mr. H. L. White, show an evident ally of *E. vernicatus* Fairm. and *E. sub-viridis* Geb., both from New Guinea. Besides differing in colour from both, the former is said to be sulcate between the eyes, the pronotum "multi-impresso," and elytral punctures "apice obsolete"; from the latter it is separated by closer eyes and elytral punctures not at all in pairs. *E. wollastoni* Blair is larger *inter alia*. I have named it after the great naturalist whose name is associated with its habitat.

Type in Australian Museum.

EBENOLUS MINOR, n.sp.

Oblong, subcylindric; head, pronotum, underside and legs black, the two first subnitid, the two last nitid; elytra blue, sometimes tending to purple with purple and golden metallic gleams near apical declivity; antennae, palpi and tarsi red. *Head* impressed on front, densely and finely punctate, intereye-space in ♂ about the length of 1st antennal joint, in ♀ rather more distant; antennae slender, extending beyond the base of prothorax, joints on basal half sublinear, widening and growing shorter outwards. *Prothorax*: apex and base truncate, sides nearly straight, slightly wider in front than behind; the anterior angles obtuse and a little blunted at tips, posterior angles sharply rectangular; disc densely and finely rugose-punctate, the narrow lateral margins not visible from above; transversely impressed near basal margin, medial line not indicated. *Scutellum* triangular, punctate. *Elytra* wider than prothorax at base, shoulders sub-angulate, but rounded; sides parallel; striate-punctate, the seriate punctures round, large, rather close and regular; intervals impunctate, generally flattish, some intervals towards sides and apex lightly convex. Sternal regions densely, the abdomen closely and finely punctate; post tarsi with first joint about as long as the rest combined. *Dimensions*: 7-7.5 x 2-2.5 mm.

Hab.—Moa, Banks Island, Torres Straits (W. McLennan, in Australian Museum, presented by Mr. H. L. White). Several examples recorded as attracted to light by Mr. McLennan; both sexes evidently present amongst the nine specimens closely examined, which show little variation of colour or size. Its small size separates it from any described species, while it is further distinguished from the species having a black prothorax and coloured elytra by its densely rugose-punctate pronotum.

Type in Australian Museum.

The genus *Ebenolus* Fairm., with genotype *E. vernicatus* Fairm., segregates a special group of the heterogeneous and numerous Strongyliinae that appears to have its zoo-centre in Papua. It probably includes some of our Australian species, especially *S. macleayi* Pasc., with which Mr. Blair compares his *S. wollastoni*, and which Gebien has recently placed under *Ebenolus*, while describing six new species from New Guinea. The chief characters appear to be: eyes close, antennae long and slender, prothorax subquadrate, its sides margined, prosternum sulcate, body oblong, non-gibbous, the shoulders angulate without tuberosity.

CISTELIDÆ.

Homotrysis (*Allecula*) *flavicornis* Macl.—Since the Australian species of *Allecula* are now merged in *Homotrysis* the name *macleayi*, given by Borchmann in the Junk catalogue to this species, is superfluous. There is a black variety of this, commonly found round Sydney, as well as the typical brown form. Possibly the brown colour shows immaturity.